

U.S. Appln. No. 09/864,696

IBM Docket No.:

BOC9-2000-0091

Amendment Dated November 19, 2004

Reply to Office Action of August 13, 2004

Docket No. 61-69-224

REMARKS/ARGUMENTS

These remarks are submitted responsive to the Office Action of August 13, 2004 (Office Action). This response is being filed with a petition for a one month retro-active extension of time with the appropriate fee.

In paragraphs 2-3, the Examiner has rejected a portion of the specification as well as claim 4 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Applicants have amended that portion for clarity, as noted in the amendment to specification section. Applicants have also amended claim 4 for clarity in the manner suggested by the Examiner. Accordingly, Applicants respectfully request the 35 U.S.C. § 112 rejection to claim 4 be removed.

In paragraph 4, the Examiner has rejected claims 1-4, 6-11, and 13-23 under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,480,890 to Lee, *et al.* (Lee). In paragraphs 5, the Examiner has rejected claims 5 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of U.S. Patent No. 6,178,438 to Tschirhart, *et al.* (Tschirhart).

Prior to addressing the rejections on the art, a brief review of the Applicants' invention is in order. The present invention provides an internal interface to external applications for accessing service components in a service logical execution environment (SLEE). Notably, the claimed invention details a service component operating within the SLEE, which is preconfigured to communicate with an external service side program, thereby providing an interface between an Internet service application and the SLEE.

The claimed invention is particular to the SLEE architecture, which is a specific environment targeted at communications applications. The SLEE environment is a complex, run-time, executable environment based on the SLEE specification that structures application logic of communications applications as a collection of reusable

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object-orientated components. The SLEE specification further details requirements for composing these components into higher level and more sophisticated services. That is, the SLEE architecture defines a contract between these components and the container that will host these components at run-time. The Applicants' disclose a new component that operates within the container, which is an Internet Enabled Service Component (IESC) that functions as an Internet interface component.

Turning to the rejections on the art, claims 1-4, 6-11, and 13-23 under 35 U.S.C. § 102(e) as being anticipated by Lee. Lee teaches a web interface to a service creation environment, which permits a user (or telephone subscriber) to utilize a Web-based interface to modify parameters within a specially configured software development environment. Consequently, administrators and/or software designers are spared the time of manually configuring an AIN network to satisfy subscriber's specific concerns. Effectively, Lee teaches that subscribers should, using a tailored software development interface, be able to configure parameters of an AIN network, in a fashion analogous to how a user can configure computer based applications via user-configurable settings.

More specifically, Lee teaches that a special development environment called a service creation environment 14 can be accessed by a subscriber through a Web interface 12. Previously established call scripting processes 62 can accept user input 60 that adjusts one or more subscriber configurable parameters in the service creation environment 14. The updating of parameters generally causes a database field to be updated (column 5, lines 20-40 showing one such update example). The parameters can be updated in the service creation environment 14 and reported by the service logic process editor 32 to the service logic parser 42 so that the subscriber can see the affect of the parameter changes. Accordingly, the service logic parser 42 formats a file conveyed from the service control environment 14 into a format for the Web interface 12 (an example of this formatting is shown between column 7 line 40 to column 8 line 26).

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It can be appreciated that Lee is a software development tool and/or an user accessible administration tool for a development or administration environment. Lee provides no teachings for a Web interface capable of functioning in an execution environment. Further, Lee makes no mention of a SLEE and teachings provided within Lee would not make sense within such a real-time execution environment. By an execution environment for a SLEE, the Applicants (as noted in the specification) mean that data and tasks can be passed from one component in the SLEE container to the IESC component which transfers the data and/or task to a registered Internet component outside the SLEE container – all occurring in accordance with timing requirements necessary for real-time telephone operations of the SLEE.

Lee's teachings are not applicable to this type of execution environment and one of ordinary skill in the art would not turn to Lee for teachings in this regard. Lee's entire specification is tailored to an administrative interface, which does not have real-time telephony timing concerns and does not function within the same problem space as the Applicants' invention. For example, the data_change.dat file of column 5, lines 15-40 and the data_change.html file of column 7, line 40 – column 8, line 26) clarify that the interfaces (FIG. 4-15) pertain to a user Web interface and not an interface between two or more automated components (one within a SLEE container and the other outside the SLEE).

Referring to claims 1, the Applicants claim an advanced intelligent network comprising:

a service logic execution environment (SLEE), said SLEE comprising an event handler for routing messages between and among client components and service components;

at least one service component configured to post and receive messages to and from other service components in said SLEE through said event handler; and

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at least one Internet enabled service component (IESC) executing in said SLEE, said IESC configured to post and receive messages to and from other service components in said SLEE through said event handler, said IESC communicatively linked to a server side program external to said SLEE.

Lee fails to contemplate a SLEE or SLEE components (real time components that execute in an operational environment) in any fashion. The cited portion of Lee (column 1, lines 49-59) detail a subscriber accessible (via a Web interface 12) software development or administration environment (service creation environment 14) through which subscribers can modify data base parameters, resulting in subscriber specific AIN changes.

Moreover, Lee provides no teachings regarding an Internet enabled service component (IESC) of a SLEE that is explicitly claimed by the Applicants. The claimed IESC, as noted at page 13, lines 5-6 is a component that the SLEE server 200 can execute. The IESC can register with an internal event handling component of the SLEE server 200. The claimed IESC is a software object integrated within the SLEE that performs programmatic actions within an execution environment.

Respectfully, nothing even remotely similar to the IESC is contemplated by Lee. The Web interface 12 cited at column 3, lines 19-27 is a client accessible interface provided via a Web server 20. A subscriber access the Web server 20 via a web browser. Further, the Web server 20 itself is an interface between the subscriber and the service control environment 14, which is itself NOT part of an execution environment. That is, the service control environment 14 does not interface with the service switching point 15 in an executable fashion (so that routines within the service control environment 14 are called and executed as real-time telephony tasks are performed, which is the purpose of SLEE components like the IESC). This aspect of Lee is emphasized at column 3, lines 28-32 that states, "New services are defined in service creation environment 14 and then

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downloaded to the appropriate network nodes, such as service control point 17 and service switching point 15, for execution." The service control environment 14 modifies parameters within the SSP 15 (like any other administrative/development environment does) and does not perform programmatic actions for the SSP 15 responsive to calls from the SSP 15. Consequently, in Lee the Web interface 12 is a subscriber interface between a browser and an administrative environment, an environment which itself does not interface with the SSP 15 in an execution environment. Hence, Lee is fundamentally and structurally unrelated to a SLEE and components functioning within a SLEE environment.

Referring to claim 2, Applicants claim the IESC that routes events between the SLEE and the at least one client service instance. Lee provides no teachings regarding a SLEE or any equivalent environment. Specifically, Lee provides no teachings for routing events of an execution environment (SLEE) to objects outside the SLEE.

Referring to claim 8 and 16, Applicants claim the IESC that registers with the SLEE and receives events routed by the SLEE. Lee provides no teachings regarding registering components with a SLEE.

Since Lee fails to teach each of the Applicants claimed limitations, the 35 U.S.C. § 102(e) rejections to claims 1-4, 6-11, and 13-23 should be withdrawn, which action is respectfully requested.

In paragraph 5 of the Office Action, the Examiner has rejected claims 5 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Tschirhart. Tschirhart teaches a service management system for an advanced intelligent network including a plurality of gateways in communication with a plurality of network nodes and service clients which may issue service requests. Tschirhart facilitates communications for a service creation environment so that network nodes that operate with dissimilar communications protocols can exchange information. Tschirhart is silent with regards to a SLEE or with components that execute within a SLEE. Additionally, Tschirhart

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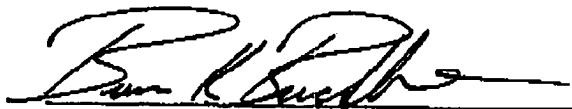
provides no teachings or suggestions regarding any environment functionally or structurally equivalent to a SLEE environment. Tschirhart does not contemplate a component internal to a SLEE used to interface with components outside the SLEE via an Internet connection.

Accordingly, Tschirhart fails to cure the deficiencies of Lee. Since neither Lee, Tschirhart, or combinations thereof teach nor suggest IESC that executes with a SLEE, the 35 U.S.C. § 103(a) rejections to claims 5 and 12 should be withdrawn, which action is respectfully requested.

In light of the above, Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. The Applicant requests that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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